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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/484,516	01/18/00	HALEPETE S	TRANS34

TM02/1107

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EXAMINER	
MYERS,P	
ART UNIT	**PAPER NUMBER**
2181	

DATE MAILED: 11/07/01

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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PTO-90C (Rev. 2/95)

1- File Copy

Office Action Summary	Application No. 09/484,516	Applicant(s) HALEPETE ET AL.	
	Examiner Paul R. Myers	Art Unit 2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 September 2001* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Amendment

1. Applicants canceled claim 5 in the marked up section but did not cancel claim 5 in the Amendment section of the Amendment thus claim 5 is not properly canceled.

Response to Arguments

2. Applicant's arguments filed 09/27/01 have been fully considered but they are not persuasive.

In response to applicants argument that Horden et al does not teach the newly added feature of the clock generator being integral to the processor See MPEP 2144.04 V B "Making Integral".

In response to applicants argument that the making integral of the clock generator eliminates delays in crossing various interfaces. The examiner agrees however this is an extremely well known advantage of integrating circuitry and just because the applicants recognize an advantage that would naturally flow from making the clock generator integral does not make the integrating of the clock generator unobvious.

The fact that Horden et al expressly teaches integrating the clock generator, state machine, and the voltage regulator on a single chip but does not also expressly teach adding the processor 16 to the same chip does not as applicants argue make integrating all these units into the same chip unobvious.

In response to applicants argument that Horden et al does not teach the processor adjusting the frequency while it is executing instructions. While this is clearly false since the

state machine accepts commands from the processor for the frequency adjustment, it is also immaterial in that this feature is not claimed.

In response to applicants argument that Horden et al does not teach the feature fro which the examiner took official notice.

"Not only the specific teachings of a reference but also reasonable inferences which the artisan would have logically drawn therefrom may be properly evaluated in formulating a rejection." *In re Preda*, 401 F.2d 825, 159 USPQ 342 (CCPA 1968) and *In re Shepard* 319 F.2d 194, 138 USPQ 148 (CCPA 1963).

"Furthermore, artisans must be presumed to know something about the art apart from what the references disclose." *In re Jacoby*, 309 F.2d 513, 135 USPQ 317 (CCPA 1962).

"The conclusion of obviousness may be made from common knowledge and common sense of a person of ordinary skill in the art without any specific hint or suggestion in a particular reference." *In re Bozek*, 416 F.2d 1385, 163 USPQ 545 (CCPA 1969).

"Every reference relies to some extent on knowledge of persons skilled in the art to complement that which is disclosed therein." *In re Bode*, 550 F.2d 656, 193 USPQ 12 (CCPA 1977).

As to applicants argument that the references fail to disclose any motivation for combining the references.

The test of obviousness is:

"whether the teachings of the prior art, taken as a whole, would have made obvious the claimed invention," *In re Gorman*, 933 F.2d at 986, 18 USPQ 2d at 1888.

> Subject matter is unpatentable under section 103 if it "'would have been obvious . . . to a person having ordinary skill in the art.' While there must be some teaching, reason, suggestion, or motivation to combine existing elements to produce the claimed device, it is not necessary that the cited references or prior art specifically suggest making the combination." *In re Nilssen*, 851 F.2d 1401, 1403, 7 USPQ 2d 1500, 1502 (Fed. Cir. 1988).

> "Such suggestion or motivation to combine prior art teachings can derive solely from the existence of a teaching, which one of ordinary skill in the art would be presumed to know, and the use of that teaching to solve the same [or] similar problem which it addresses." *In re Wood*, 599 F.2d 1032, 1037, 202 USPQ 171, 174 (CCPA 1979).

> "In sum, it is off the mark for litigants to argue, as many do, that an invention cannot be held to have been obvious unless a suggestion to combine prior art teachings is found *in* a specific reference."

Entire quote from *In re Oetiker*, 24 USPQ 2d 1443 (CAFC 1992).

Accordingly, it is not required to disclose or specifically suggest particular elements. Instead the measure is what the teachings would suggest to one of ordinary skill in the art, not what the art specifically suggests.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 5 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by Horden et al PN 5,812,860.

In regards to claim 5: Horden et al teaches a method for controlling the operating condition of a computer processor comprising the steps of: determining a maximum allowable power consumption level from the operating condition of the processor (Column 6 lines 23-25); determining the maximum frequency which provides power not greater than the allowable power consumption level (Column 6 lines 26-30); determining a minimum voltage which allows operation at the maximum frequency determined (Column 6 lines 33-35); and dynamically changing the operating condition of the processor by changing the frequency and voltage to the maximum frequency and minimum voltage determined (Column 6 lines 36-40). Horden et al also teaches the Clock generator, State machine, and Voltage regulator being on a single chip.

Horden et al does not expressly teach them being on the same chip as the processor. MPEP 1244.04 V B states making integral is not a patentably distinct.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-4 and 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horden et al PN 5,812,860.

In regards to claim 1: Horden et al teaches a method for controlling the operating condition of a computer processor comprising the steps of: determining a maximum allowable power consumption level from the operating condition of the processor (Column 6 lines 23-25); determining the maximum frequency which provides power not greater than the allowable power consumption level (Column 6 lines 26-30); determining a minimum voltage which allows operation at the maximum frequency determined (Column 6 lines 33-35); and dynamically changing the operating condition of the processor by changing the frequency and voltage to the maximum frequency and minimum voltage determined (Column 6 lines 36-40). Horden et al also teaches the Clock generator, State machine, and Voltage regulator being on a single chip. Horden et al does not expressly teach them being on the same chip as the processor. MPEP 1244.04 V B states making integral is not a patentably distinct.

In regards to claims 2, 6 and 8: Horden et al teaches a power supply furnishing selectable output voltages (7 and 5); a clock frequency source (8 and 6); a central processor (Figure 1) including: a processing unit (1, 4) for providing values (15) indicative of operating conditions of the central processor; and a clock frequency generator (6) receiving a clock frequency (14) from a clock frequency source (8) and providing a selectable output clock frequency (11) to the processing unit (1, 4); and means for detecting the value indicative of operating conditions of the central processor (6 via 5 and 4) and causing the power supply (7, 5 via 12) and clock frequency generator (6) to furnish an output clock frequency (11) and voltage level (9) for the central processor.

In regards to claims 3, 7 and 9: Horden et al teaches the means for detecting the values including software (4) for determining the output frequency and power.

In regards to claims 4 and 10-11: Horden et al teaches adjusting the operating condition of the processor core for optimum operation. Horden et al does not expressly teach the core including a plurality of functional units. Official notice is taken that processor cores with a plurality of functional units is very well known in the art. It would have been obvious to a person of ordinary skill in the art at the time of the invention to include a plurality of functional units in the core because this would have allowed for greater processing capabilities.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul R. Myers whose telephone number is 703 305 9656. The examiner can normally be reached on Mon-Thur 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoleil can be reached on 703 305 9713. The fax phone numbers for the organization where this application or proceeding is assigned are 703 308 9051 for regular communications and 703 308 9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305 3900.

PRM
November 6, 2001

Paul R. Myers

PAUL R. MYERS
PRIMARY EXAMINER